# Attention:

Envotech-Illinois, LLC Attn: Nicholas Bauer 2782 Landfill Trail Litchfield, Illinois 62056

# State of Illinois

# CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

# Source:

Litchfield-Hillsboro Landfill 2782 Landfill Trail Litchfield, Illinois 62056

I.D. No.: 135815AAE Permit No.: 99110105

Permitting Authority:

Illinois Environmental Protection Agency Bureau of Air, Permit Section 217/785-1705

# CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

Type of Application: Renewal

Purpose of Application: Renew Existing CAAPP Permit for 5 Years

<u>ID No.</u>: 135815AAE Permit No.: 99110105

Statement of Basis No.: 99110105-14-10

Date Application Received: August 4, 2006,

Date Issued: TBD

Expiration Date: // , // , 2019

Renewal Submittal Date: 9 Months Prior to TBD

Source Name: Litchfield-Hillsboro Landfill

Address: 2782 Landfill Trail

City: Litchfield
County: Montgomery
ZIP Code: 62056

This permit is hereby granted to the above-designated source authorizing operation in accordance with this CAAPP permit, pursuant to the above referenced application. This source is subject to the conditions contained herein. For further information on the source see Section 1 and for further discussion on the effectiveness of this permit see Condition 2.3(g).

If you have any questions concerning this permit, please contact Daniel Rowell at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MTR:DBR:psj

cc: IEPA, Permit Section IEPA, FOS, Region 2 Lotus Notes Database

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# Section 1 - Source Information

# 1. Addresses

## Source

Litchfield-Hillsboro Landfill 2782 Landfill Trail Litchfield, Illinois 62056

## Operator

Envotech-Illinois, LLC 2782 Landfill Trail Litchfield, Illinois 62056

## Owner

Envotech-Illinois, LLC 2782 Landfill Trail Litchfield, Illinois 62056

#### Permittee

The Owner and Operator of the source as identified in this table.

# 2. Contacts

## Certified Officials

The source shall submit an Administrative Permit Amendment for any change in the Certified Officials, pursuant to Section 39.5(13) of the Act.

	Name	Title	
Responsible Official	Timothy Trost	Area President	
Delegated Authority	No other individuals have been authorized by the IEPA.		

#### Other Contacts

_	Name	Phone No.	Email
Source Contact, Correspondence, and Billing	Nicholas Bauer	618-659-5292	nbauer@republicservices.com
Technical Contact	Nicholas Bauer	618-659-5292	nbauer@republicservices.com

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# Section 2 - General Permit Requirements

## 1. Prohibitions

- a. It shall be unlawful for any person to violate any terms or conditions of this permit issued under Section 39.5 of the Act, to operate the CAAPP source except in compliance with this permit issued by the IEPA under Section 39.5 of the Act or to violate any other applicable requirements. All terms and conditions of this permit issued under Section 39.5 of the Act are enforceable by USEPA and citizens under the Clean Air Act, except those, if any, that are specifically designated as not being federally enforceable in this permit pursuant to Section 39.5(7)(m) of the Act. [Section 39.5(6)(a) of the Act]
- b. After the applicable CAAPP permit or renewal application submittal date, as specified in Section 39.5(5) of the Act, the source shall not operate this CAAPP source without a CAAPP permit unless the complete CAAPP permit or renewal application for such source has been timely submitted to the IEPA. [Section 39.5(6)(b) of the Act]
- c. No Owner or Operator of the CAAPP source shall cause or threaten or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations applicable to the source, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]
- d. Pursuant to Section 39.5(7)(g) of the Act, emissions from the source are not allowed to exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder, consistent with Section 39.5(17) of the Act and applicable requirements, if any.

#### 2. Emergency Provisions

Pursuant to Section 39.5(7)(k) of the Act, the Owner or Operator of the CAAPP source may provide an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations under this CAAPP permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

- a. i. An emergency occurred and the source can identify the cause(s) of the emergency.
  - ii. The source was at the time being properly operated.
  - iii. The source submitted notice of the emergency to the IEPA within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
  - iv. During the period of the emergency the source took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or requirements in this permit.
- b. For purposes of Section 39.5(7)(k) of the Act, "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, such as an act of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operation error.
- c. In any enforcement proceeding, the source seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or

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upset provision contained in any applicable requirement. This provision does not relieve the source of any reporting obligations under existing federal or state laws or regulations.

#### 3. General Provisions

#### a. Duty to Comply

The source must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

#### b. Need to Halt or Reduce Activity is not a Defense

It shall not be a defense for the source in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

## c. Duty to Maintain Equipment

The source shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements. [Section 39.5(7) (a) of the Act]

#### d. Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under. [Section 39.5(7)(a) of the Act]

#### e. Duty to Pay Fees

- i. The source must pay fees to the IEPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act]
- ii. The IEPA shall assess annual fees based on the allowable emissions of all regulated air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]
- iii. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276.

  Include on the check: ID #, Permit #, and "CAAPP Operating Permit Fees". [Section 39.5(18)(e) of the Act]

#### f. Obligation to Allow IEPA Surveillance

Pursuant to Sections 4(a), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, inspection and entry requirements that necessitate that, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the source shall allow the IEPA, or an authorized representative to perform the following:

i. Enter upon the source's premises where the emission unit(s) are located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

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- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- iv. Sample or monitor any substances or parameters at any location at reasonable times:
  - A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
  - B. As otherwise authorized by the Act.
- v. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

# g. Effect of Permit

- i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall alter or affect the following:
  - A. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section.
  - B. The liability of the Owner or Operator of the source for any violation of applicable requirements prior to or at the time of permit issuance.
  - C. The applicable requirements of the acid rain program consistent with Section  $408\,\text{(a)}$  of the Clean Air Act.
  - D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.
- ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

# h. Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the source shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

# 4. Testing

a. Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of

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any tests conducted as required by this permit or as the result of a request by the IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7) (a) of the Act]

- b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator: The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the IEPA: The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

#### 5. Recordkeeping

## a. Control Equipment Maintenance Records

Pursuant to Section 39.5(7)(b) of the Act, a maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates maintenance was performed and the nature of preventative maintenance activities.

## b. Retention of Records

- i. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]
- ii. Pursuant to Section 39.5(7)(a) of the Act, other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a different period is specified by a particular permit provision.

## c. Availability of Records

- i. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer) in response to an IEPA or USEPA request during the course of a source inspection.
- ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the IEPA. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA or the Permittee believes that the volume and nature of

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requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 2.9(d))

#### 6. Certification

#### a. Compliance Certification

- i. Pursuant to Section 39.5(7)(p)(v)(C) of the Act, the source shall submit annual compliance certifications by May 1 unless a different date is specified by an applicable requirement or by a particular permit condition. The annual compliance certifications shall include the following:
  - A. The identification of each term or condition of this permit that is the basis of the certification.
  - B. The compliance status.
  - C. Whether compliance was continuous or intermittent.
  - D. The method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- ii. Pursuant to Section 39.5(7)(p)(v)(D) of the Act, all compliance certifications shall be submitted to the IEPA Compliance Section. Address is included in Attachment 3.
- iii. Pursuant to Section 39.5(7)(p)(i) of the Act, all compliance reports required to be submitted shall include a certification in accordance with Condition 2.6(b).

## b. Certification by a Responsible Official

Any document (including reports) required to be submitted by this permit shall contain a certification by the responsible official of the source that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included in Attachment 4 of this permit.

## 7. Permit Shield

- a. Pursuant to Section 39.5(7)(j) of the Act, except as provided in Condition 2.7(b) below, the source has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the IEPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit. This permit shield does not extend to applicable requirements which are promulgated after <a href="Error! Bookmark not defined." (date USEPA notice started)">Error! Bookmark not defined.</a> (date USEPA notice started), unless this permit has been modified to reflect such new requirements.
- b. Pursuant to Section 39.5(7)(j) of the Act, this permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

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c. Pursuant to Section 39.5(7)(a) of the Act, the issuance of this permit by the IEPA does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the IEPA or the USEPA may have against the applicant including, but not limited to, any enforcement action authorized pursuant to the provision of applicable federal and state law.

# 8. Title I Conditions

Pursuant to Sections 39(a), 39(f), and 39.5(7)(a) of the Act, as generally identified below, this CAAPP permit may contain certain conditions that relate to requirements arising from the construction or modification of emission units at this source. These requirements derive from permitting programs authorized under Title I of the Clean Air Act (CAA) and regulations thereunder, and Title X of the Illinois Environmental Protection Act (Act) and regulations implementing the same. Such requirements, including the New Source Review programs for both major (i.e., PSD and nonattainment areas) and minor sources, are implemented by the IEPA.

- a. This permit may contain conditions that reflect requirements originally established in construction permits previously issued for this source. These conditions include requirements from preconstruction permits issued pursuant to regulations approved or promulgated by USEPA under Title I of the CAA, as well as requirements contained within construction permits issued pursuant to state law authority under Title X of the Act. Accordingly, all such conditions are incorporated into this CAAPP permit by virtue of being either an "applicable Clean Air Act requirement" or an "applicable requirement" in accordance with Section 39.5 of the Act. These conditions are identifiable herein by a designation to their origin of authority.
- b. This permit may contain conditions that reflect necessary revisions to requirements established for this source in preconstruction permits previously issued under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIR".
  - i. Revisions to original Title I permit conditions are incorporated into this permit through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
  - ii. Revised Title I permit conditions shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.
- c. This permit may contain conditions that reflect new requirements for this source that would ordinarily derive from a preconstruction permit established under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIN".
  - i. The incorporation of new Title I requirements into this CAAPP permit is authorized through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
  - ii. Any Title I conditions that are newly incorporated shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.

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# 9. Reopening and Revising Permit

#### a. Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the source for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

# b. Reopening and Revision

Pursuant to Section 39.5(15)(a) of the Act, this permit must be reopened and revised if any of the following occur:

- i. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- ii. Additional requirements become applicable to the source for acid deposition under the acid rain program;
- iii. The IEPA or USEPA determines that this permit contains a material mistake or that an inaccurate statement was made in establishing the emission standards or limitations, or other terms or conditions of this permit; or
- iv. The IEPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

## c. Inaccurate Application

Pursuant to Sections 39.5(5)(e) and (i) of the Act, the IEPA has issued this permit based upon the information submitted by the source in the permit application referenced on page 1 of this permit. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation or reopening of this CAAPP under Section 39.5(15) of the Act.

#### d. Duty to Provide Information

The source shall furnish to the IEPA, within a reasonable time specified by the IEPA any information that the IEPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the source shall also furnish to the IEPA copies of records required to be kept by this permit. [Section 39.5(7)(o)(v) of the Act]

# 10. Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. [Section 39.5(7)(o)(vii) of the Act]

## 11. Permit Renewal

a. Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of the most recent issued CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(1) and (0) of the Act]

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b. For purposes of permit renewal, a timely application is one that is submitted no less than 9 months prior to the date of permit expiration. [Section 39.5(5)(n) of the Act]

#### 12. Permanent Shutdown

Pursuant to Section 39.5(7)(a) of the Act, this permit only covers emission units and control equipment while physically present at the source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

## 13. Startup, Shutdown, and Malfunction

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

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# Section 3 - Source Requirements

# 1. Applicable Requirements

## a. Fugitive Particulate Matter

#### i. Applicable Requirement(s)

A. Pursuant to 35 IAC 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source, unless the exception for wind speed greater than 25 mph is demonstrated in accordance with 35 IAC 212.314.

## ii. Compliance Method (Fugitive Particulate Matter)

Pursuant to Sections 39.5(7)(b) and (d) of the Act, upon request by the Α. Illinois EPA, the Owner and Operator of the MSW landfill shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the landfill activities to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for at least seven calendar days for particular area(s) of concern at the source, as specified in the request. Observations shall begin either within one day or three days of receipt of a written request from the Illinois EPA, depending, respectively, upon whether observations will be conducted by employees of the Owner and Operator of the MSW landfill or a third-party observer hired by the Owner and Operator of the MSW landfill to conduct observations at its behest. The Owner and Operator of the MSW landfill shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

## b. Ozone Depleting Substances

Pursuant to 40 CFR 82.150(b), the Owner and Operator of the MSW landfill shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- i. Pursuant to 40 CFR 82.156, persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices.
- ii. Pursuant to 40 CFR 82.158, equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment.
- iii. Pursuant to 40 CFR 82.161, persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program.
- iv. Pursuant to 40 CFR 82 Subpart B, any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner shall comply with 40 CFR 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.
- v. Pursuant to 40 CFR 82.166, all persons shall comply with the reporting and recordkeeping requirements of 40 CFR 82.166.

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## c. Asbestos Demolition and Renovation

- i. Asbestos Fees. Pursuant to Section 9.13(a) of the Act, for any site for which the Owner or Operator must file an original 10-day notice of intent to renovate or demolish pursuant to Condition 3.1(c)(ii) below and 40 CFR 61.145(b), the owner or operator shall pay to the IEPA with the filing of each 10-day notice a fee of \$150.
- ii. Pursuant to 40 CFR 61 Subpart M, Standard of Asbestos, prior to any demolition or renovation at this facility, the Owner and Operator of the MSW landfill shall fulfill notification requirements of 40 CFR 61.145(b).
- iii. Pursuant to 40 CFR 61.145(c), during demolition or renovation, the Owner and Operator of the MSW landfill shall comply with the procedures for asbestos emission control established by 40 CFR 61.145(c).

# d. NESHAP for Municipal Solid Waste Landfills

- i. Pursuant to the definitions in 40 CFR 63.1990, the Litchfield-Hillsboro Landfill (Section 4.1) is considered to be a "municipal solid waste landfill or MSW landfill" for purposes of compliance with 40 CFR Part 63 Subpart AAAA National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.
- ii. Pursuant to 39.5(7)(a) and (b) of the Act, for purposes of compliance with 40 CFR Part 63 Subpart AAAA, documentation and data required in Section 4.1 for Litchfield-Hillsboro Landfill shall be included in, applicable compliance records and/or reports, required under 40 CFR Part 63 Subpart AAAA, shown in Section 4.1.

# e. <u>Nonmethane Organic Compounds</u>

- i. Pursuant to 35 IAC 220, Nonmethane Organic Compounds, the Litchfield-Hillsboro landfill (Section 4.1) is considered to be a "municipal solid waste landfill or MSW landfill" pursuant to the definitions in 35 IAC 220.110.
- ii. Pursuant to 35 IAC 220.200, an owner of an MSW landfill for which construction or modification commenced before May 30, 1991 is subject to the requirements of 35 IAC 220 if the landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.
- iii. Pursuant to 39.5(7)(a) and (b) of the Act, for purposes of compliance with 35 IAC 220, documentation and data required in Section 4.1 for Litchfield-Hillsboro Landfill shall be included in, applicable compliance records and/or reports, required under 35 IAC 220, shown in Section 4.1.

## f. Future Emission Standards

i. Pursuant to Section 39.5(15)(a) of the Act, this source shall comply with any new or revised applicable future standards of 40 CFR 60, 61, 62, or 63; or 35 IAC Subtitle B after the date issued of this permit. The Owner and Operator of the MSW landfill shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 2.6(a). This permit may also have to be revised or reopened to address such new regulations in accordance to Condition 2.9.

#### 2. Applicable Plans and Programs

As of the date of issuance of the permit, there are no applicable plans and/or programs that need to be addressed under this section.

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# 3. Title I Requirements

As of the date of issuance of this permit, there are no source-wide Title I requirements that need to be included in this Condition.

## 4. Synthetic Minor Limits

As of the date of issuance of this permit, there are no source-wide synthetic minor limits that need to be included in this Condition.

#### 5. Reporting Requirements

The Owner and Operator of the MSW landfill shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 2.

# a. Deviation Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Owner and Operator of the MSW landfill shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:
  - I. Requirements in Condition 3.1(a)(i), 3.1(b), 3.1(c), 3.1(d), 3.1(e) and 3.1(f).
- ii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.
  - B. Emission unit(s) and/or operation involved.
  - C. The duration of the event.
  - D. Probable cause of the deviation.
  - E. Corrective actions or preventative measures taken.
- iii. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.6(b).

## b. Semiannual Reporting

i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Owner and Operator of the MSW landfill shall submit Semiannual Monitoring Reports to the IEPA, Air Compliance Section, summarizing required monitoring as part of the Compliance Methods in this Permit submitted every six months as follows, unless more frequent reporting is required in other parts of this permit.

Monitoring PeriodReport Due DateJanuary through JuneJuly 31July through DecemberJanuary 31

ii. The Semiannual Monitoring Report must be certified by a Responsible Official consistent with Condition 2.6(b).

## c. Annual Emissions Reporting

Pursuant to 35 IAC Part 254, the Source shall submit an Annual Emission Report to the Air Quality Planning Section, due by May 1 of the year following the calendar year in which the emissions took place. All records and calculations upon which the verified and reported data are based must be retained by the source.

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# 6. Source-Wide Non-Applicability Determinations

- a. Pursuant to 40 CFR 60.750(a) the source is not subject to the requirements of the New Source Performance Standards for Municipal Solid Waste Landfills, 40 CFR 60 Subpart WWW, because the MSW landfill has not underwent a modification or commenced any new construction on or after May 30, 1991.
- b. Pursuant to 35 IAC 212.302(a) and (b), the operations at this source are not subject to 35 IAC 212.304 through 212.310 and 212.312 because, respectively, the operations at the source are not designated as being applicable based upon the sources SIC code and because it is not located in the geographical areas defined in 35 IAC 212.324(a)(1).

Should this source become subject to 35 IAC 212.302, the Owner and Operator of the MSW landfill shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). Any future Fugitive PM Operating Program made by the Owner and Operator of the MSW landfill during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Owner and Operator of the MSW landfill of a deficiency with any Fugitive PM Operating Program, the Owner and Operator of the MSW landfill shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

c. Pursuant to 35 IAC 35 244.142, the source is not subject to the requirement for an episode action plan, pursuant to 35 IAC 35 IAC 244.141, because the source is not a facility of a type set forth in 35 IAC 35 244.142.

Should this source become subject to 35 IAC 244.142, the Owner and Operator of the MSW landfill shall prepare, submit, and operate under an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures and submitted to the IEPA for its review. The Episode Action Plan shall contain the information specified in 35 IAC 244.144. The Owner and Operator of the MSW landfill shall immediately implement the appropriate steps described in this Episode Action Plan should an air pollution alert or emergency be declared. Any future Episode Action Plan made by the Owner and Operator of the MSW landfill during the permit term is automatically incorporated by reference provided the Episode Action Plan is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Episode Action Plan. In the event that the IEPA notifies the Owner and Operator of the MSW landfill of a deficiency with any Episode Action Plan, the Owner and Operator of the MSW landfill shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

- d. Excluding the open flare referenced in Section 4.1, the processes at this source, as referenced in Section 3.1(a), are not subject to 35 IAC 212.123(a), because they are do not meet the definition of an emission unit pursuant to 35 IAC 211.1950.
- e. Pursuant to 35 IAC 212.314, Condition 3.1(a)(i)(A) and 35 IAC 212.301 shall not apply when the wind speed is greater than 40.2 km/hr (25 mph).
- f. Pursuant to 35 IAC 212.700, the source is not subject to 35 IAC Part 212 Subpart U because the source is not located in the areas designated in and subject to 35 IAC 212.324(a)(1) or 212.423(a).

Should this source become subject to 35 IAC 212.700, then the Owner and Operator of the MSW landfill shall prepare and operate under a  $PM_{10}$  Contingency Measure Plan reflecting the  $PM_{10}$  emission reductions as set forth in 35 IAC 212.701 and 212.703. The Owner and

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Operator of the MSW landfill shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate  $PM_{10}$  Contingency Measure Plan.

g. Pursuant to 40 CFR 68.10, the source is not subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68 because the source does not meet the listed applicability requirements.

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the Owner and Operator of the MSW landfill shall submit a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or submit a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan, as part of the annual compliance certification required by Condition 2.6(a). This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- h. i. The internal combustion engines at the source are not subject to the requirements of 40 CFR 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines based upon the engines not meeting the applicability criteria in 40 CFR 63.6585(a) and the definition of a Stationary reciprocating internal combustion engine (RICE) in 40 CFR 63.6675, i.e., all engines at the source are mobile and meet the definition of a non-road engine as defined in 40 CFR 1068.30.
  - ii. The internal combustion engines at the source are not subject to the requirements of 40 CFR 60 Subpart IIII New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines or 40 CFR 60 JJJJ New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines based upon the engines at the source being mobile and meeting the definition of a non-road engine as defined in 40 CFR 1068.30.
  - iii. The Owner and Operator of the MSW landfill shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), (b), (d), and (e) of the Act.
    - A. The Owner and Operator of the MSW landfill shall not have non-road engines in one location for more than 12 consecutive months. A location is any single site at a building, structure, facility, or installation. Any engine, or engines, that replaces an engine at a location and that is intended to perform the same or similar function as the engine it replaced will be included in calculating the consecutive time period.
    - B. Pursuant to 35 IAC 201.142, the Owner and Operator of the MSW landfill shall obtain a construction permit prior to a change in an existing engines status, i.e., mobile to stationary, or the installation of any new "stationary reciprocating internal combustion engine (RICE)" at the source.
    - C. Pursuant to 35 IAC 270.302(b), the Owner and Operator of the MSW landfill shall submit an application for modification of the CAAPP permit, pursuant to Section 39.5(14) of the Act, within 12 months of a change in an existing engines status, i.e., portable to stationary, or the installation of any new "stationary reciprocating internal combustion engine (RICE)" at the source.
    - D. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Owner and Operator of the MSW landfill shall verify that the engines at the source meet the definition of a mobile and non-road engines, as defined at 40 CFR 1068.30, by collecting and maintaining the following:

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- An annual inventory or list of all engines at the source, with sufficient description to identify each engine (make, model, horsepower, serial number, fuel used, etc.); and
- Semi-annual record or log of the location of each engine at the II. source which documents whether the engine is operating at a single location during the past 12 months.
- While on site, each engine shall be labeled in such way that it can be determined whether it is a non-road engine or a stationary engine subject to 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and/or 40 CFR 63 Subpart ZZZZ.

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# Section 4 - Emission Unit Requirements

# 4.1 Municipal Solid Waste (MSW) Landfill

# 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
MSW Landfill	VOM, SO <sub>2</sub> , PM, NO <sub>x</sub> , HAPs	1975	February 15, 1991	1,600 scfm open flare	None

## 2. Applicable Requirements

For the emission units in Condition 4.1.1 above, the Owner and Operator of the MSW landfill shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

## a. i. Visible Emissions (Opacity) Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124.
- B. Pursuant to 40 CFR 60.18(c)(1), the open flare shall be designed for and operated with no visible emissions as determined by the methods specified in Condition 4.1.2(a)(ii) and 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- C. Emissions of particulate (PM) from the 1,600 scfm flare shall not exceed 0.83 lb/hour and 3.62 ton/year. Compliance with this annual limit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1N]

## ii. Compliance Method (Opacity Requirements)

#### Monitoring

- A. Pursuant to Sections 39.5(7)(b), (c), and (d) of the Act, the Owner and Operator of the MSW landfill shall demonstrate compliance of the open flare with the visible emission provisions of Condition 4.1.2(a)(i)(A) and (B) through periodic monitoring for visible emissions as follows.
  - The Owner and Operator of the MSW landfill shall demonstrate compliance of the open flare with the opacity limitation of Condition 4.1.2(a)(i)(A), on a semiannual basis, using USEPA RM 22.
    - 2. Using RM 22, the observation period shall be at least 30 minutes. If visible emissions are detected for a total of 5 minutes during the 30 minute observation period, the Owner and Operator of the MSW landfill shall either record the observations as a deviation or demonstrate compliance pursuant to Condition 4.1.2 (a)(ii)(A)(I)(2) using USEPA RM 9. Follow-up RM 9 monitoring must be performed within 24 hours after a visible emission is detected via RM 22.

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- II. The Owner and Operator of the MSW landfill shall demonstrate compliance of the open flare with the visible emission provision of Condition 4.1.2(a)(i)(B), on a semiannual basis, using USEPA RM 22 with an observation period of at least 30 minutes. Except upon IEPA/USEPA written request, a written notification of testing or submittal of a formal testing protocol is not required for these activities.
- III. Any determination of a deviation from compliance with either Condition 4.1.2(a)(i)(A) and/or (B) shall cause the monitoring interval to be increased from a semiannual to a quarterly interval until the Owner and Operator of the MSW landfill can demonstrate the flare has no visible emissions based upon two semiannual monitoring periods of observation data. Thereafter, the Owner and Operator of the MSW landfill is allowed to resume monitoring on a semiannual basis.
- IV. If a deviation is indicated, pursuant to Condition 4.1.2(a)(i)(A) or (B), the Owner and Operator of the MSW landfill shall either take corrective action within 4 hours of such observation or indicate a deviation within the monitoring record. Corrective action may include, but is not limited to the following: maintenance and repair and/or adjustment of the open flare. If corrective action was taken, the Owner and Operator of the MSW landfill shall perform a follow-up verification of compliance by monitoring for visible emissions within 48 hours of the initial observation as specified in Condition 4.1.2(a)(ii)(A)(I)(1) and (2).

#### Recordkeeping

- B. I. Pursuant to 40 CFR Section 60.7(f); the owners or operators shall maintain a file of all measurements, maintenance, reports and records.
  - II. Pursuant to 39.5(7)(b) and (e) of the Act, the Owner and Operator of the MSW landfill shall collect and maintain the following records of the visible emissions observations required by Condition 4.1.2(a)(ii)(A). These records shall include the following:
    - 1. Copies of all field data sheets as per RM22 which includes but is not limited to the following:
      - (a) Date and time the observations were performed;
      - (b) Name(s) of observing personnel and their affiliation;
      - (c) The total elapsed time for each observation, i.e., the observation period, pursuant to the method used;
      - (d) Identification of the equipment which was observed; and
      - (e) The findings of the observation including the presence of any visible emissions or the percentage of opacity;
    - Operational status of the open flare;
    - An indication of the monitoring frequency, i.e., semiannual or quarterly;

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4. If applicable, a description of any corrective action taken including if the corrective action took place within 4 hours of the initial observation of exceedance.

# b. i. <u>Sulfur Dioxide Requirements</u>

- A. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide ( $SO_2$ ) into the atmosphere from any process emission source to exceed 2000 ppm.
- B. Emissions of  $SO_2$  from the 1,600 scfm flare shall not exceed 1.83 lbs/hour and 8.0 ton/year. Compliance with the annual limit shall be determined from a monthly basis from the sum of data for the current month plus the preceding 11 months (running 12 month total). [T1N]

# ii. Compliance Method (SO<sub>2</sub> Requirements)

#### Monitoring

- A. Pursuant to Sections 39.5(7)(b), (c) and (d) of the Act, the Owner and Operator of the MSW landfill shall demonstrate compliance with Condition 4.1.2(b)(i)(A) annually based upon the 12 month average LFG volumetric flow throughput through the gas collection and control system (cubic feet per minute), e.g., the sum of the month of record volumetric flow plus the preceding 11 months volumetric flow, and an analysis of the LFG chemical and physical composition as follows:
  - I. Volumetric Flow Throughput: The Owner and Operator of the MSW landfill shall install, calibrate, operate, and maintain a gas flow rate measuring device that shall record the flow to the open flare at least every 15 minutes.
  - II. LFG Chemical and Physical Composition: The LFG shall be sampled and analyzed annually for total reduced sulfur (TRS) as per RM 15/16 or ASTM D5504. Except upon IEPA/USEPA written request, a written notification of testing or submittal of a formal testing protocol is not required for these activities.
  - III. The Owner and Operator of the MSW landfill shall determine the overall sulfur content of the collected LFG in pounds per hour based upon LFG volumetric flow rate and LFG TRS data required in Condition 4.1.2(b)(ii)(B)(I) and (II).
  - IV. The Owner and Operator of the MSW landfill shall demonstrate compliance with the limitations in Condition 4.1.2(b) (i) (A) based on LFG volumetric flow rate data and LFG Chemical and Physical Composition data required in Condition 4.1.2(b) (ii) (A) (I) and (II), and calculations of the maximum possible SO2 concentration and mass (lb/hr and ton/yr) that can be emitted, assuming stoichiometric combustion, i.e., 0% excess air and 100% conversion of TRS to  $SO_2$ .
- B. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Owner and Operator of the MSW landfill shall conduct sampling for the composition of LFG collected from the source and burned in the flare. The samples shall be analyzed for sulfur and NMOC content (ppmv), and net heat content (Btu/cubic foot) of the LFG to demonstrate compliance with the requirements in Condition 4.1.2(b)(i)(A). The sampling analysis shall be repeated at least every 12 months.

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C. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Owner and Operator of the MSW landfill shall inspect and verify proper operation of the open flare on a monthly basis.

#### Recordkeeping

- Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Owner and Operator of the MSW landfill shall maintain the following records:
  - Design specifications for the flare as set by the manufacturer, including maximum gas capacity (scfm) and maximum heat input capacity (million Btu/hour). As an alternative to manufacturer's data for emissions, the Owner and Operator of the MSW landfill may keep a record of the maximum emissions, based on engineering calculations, with supporting documentation.
  - II. The LFG consumed by the flare, on a daily basis.
  - III. Operating, inspection, and/or maintenance log(s) which shall include the following:
    - Status of the flare.
    - 2. Adjustments to the flare's operating parameters.
    - 3. Identification of any period when the flare was to be in service but was out of service with a detailed explanation of the cause and an explanation of actions taken to prevent or reduce the likelihood of future occurrences.
    - 4. Date of inspection and observed condition of the flare.
    - 5. Date and description of maintenance performed.
  - IV. The total sulfur content of the LFG and the results of the compliance verification analysis pursuant to Condition 4.1.2(b)(i)(A) and 35 IAC 214.301 determined in accordance with Condition 4.1.2(b)(ii)(B).
  - V. Log of sampling and analysis activity, including measured data, documentation for the sampling and analysis activities, and supporting documentation and calculations for the sulfur content of LFG at least every 12 months.
  - VI. Monthly and annual emissions of  $SO_2$  from the affected flare (tons/month and tons/year) with supporting calculations.

#### c. i. Nonmethane Organic Compounds (NMOC) Requirements

A. Pursuant to 35 IAC 220.200(a), the affected landfill is subject to 35 IAC Part 220, Nonmethane Organic Compounds, because construction or modification of the affected landfill commenced before May 30, 1991 and has accepted waste since November 8, 1987.

# Compliance Requirements and Schedule (NMOC)

B. Pursuant to 35 IAC 220.210(b), an owner or operator of a MSW landfill having a design capacity greater than 2.5 million Mg and 2.5 million m3 shall submit an initial design capacity report and initial emissions rate report to the Illinois EPA, as provided in 35 IAC 220.280(a) and (b) and comply with Condition 4.1.2(c)(ii)(b).

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- C. Pursuant to 35 IAC 220.210(d), MSW landfills with emissions equal to or greater than 50 Mg/yr, calculated pursuant to 35 IAC 220.260(a), within 30 months after the date when the first annual NMOC emission rate report equals or exceeds 50 Mg/yr, the Owner and Operator of the MSW landfill shall operate a gas collection and control system meeting the gas collection system and control requirements of 35 IAC 220.220 and 220.230.
- D. Certify compliance: Within 6 months of initial startup or upon change in method of compliance, the Owner and Operator of the MSW landfill must certify compliance with the requirements of 35 IAC 220 Subpart B by submitting to the Illinois EPA the following:
  - I. A description of the gas collection and control system used;
  - II. The date they system was installed;
  - III. A demonstration that the control system meets the requirements of 35 IAC 220.230:
    - For active collection systems: the reduction efficiency or ppmv must be established by a performance test using the test methods required pursuant to 35 IAC 220.260(d); or
    - 2. For open flares: compliance with the requirements of  $40\ \text{CFR}$  60.18.

# Gas Collection and Control System Requirements (NMOC)

- E. Pursuant to 35 IAC 220.220, the Owner and Operator of the MSW landfill must operate an active gas collection system that meets the requirements of Condition 4.1.2(c) (iii) (b) and:
  - I. Handles the maximum expected gas flow rate from the entire area of the MSW landfill that warrants control pursuant to 35 IAC 220.220(b)(1)(D) for the period required in 35 IAC 220.250(h), as calculated in 35 IAC 220.240(a);
  - II. Collects gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
    - 1. 5 years or more, if active; or
    - 2. 2 years or more if closed or at final grade.
  - III. Is designed to minimize off-site migration of subsurface gas;
  - IV. Routes all the collected gas to a control system that complies with  $35\ \text{IAC}\ 220.230;$  and
  - V. Collects and treats gas in accordance with 35 IAC Subtitle G.

## Active Collection Systems (NMOC)

- F. I. Pursuant to 35 IAC 220.220(b), active collection wells, horizontal collectors, surface collectors, or other extraction devices shall be sited at a sufficient density throughout all gas producing areas using the procedures in 35 IAC 220.220(b)(1) through (3):
  - The collection devices within the interior and along the perimeter areas shall be designed to achieve comprehensive control of surface gas emissions.

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- 2. The sites for gas collection devices, as determined in Condition 4.1.2(c)(iii)(b)(1)(A), shall address landfill gas mitigation issues and augmentation of the collection system throughout the use of active systems at the landfill perimeter or exterior.
- Collect gas at a sufficient extraction rate, as defined in 35 IAC 220.110.
- 4. The placement of gas collection devices determined in Condition 4.1.2(c)(iii)(b)(1)(A) shall control all gas producing areas, except as provided by 35 IAC 220.220(b)(i)(D):
  - (a) Any segregated area of asbestos or nondegradeable material, if documented pursuant to 35 IAC 220.280(f)(3). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area shall be provided to the Illinois EPA upon request.
  - (b) Any nonproductive area of the landfill may be excluded from control provided that the total of all excluded areas can be shown to contribute to less than 1 percent of the total NMOC emissions from the landfill. The amount, location, and age of material shall be documented and provided to the Illinois EPA upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the total NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the equation provided in 35 IAC 220.220(b)(1)(D)(ii).
- II. Pursuant to 35 IAC 220.220(b)(2)(A), (B), and (C) the gas collection devices shall be constructed using the following equipment or procedures:
  - The landfill gas extraction components shall be constructed of polyvinylchloride (PVC), high density polyethylene (HDPE), fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to convey projected amounts of gasses; withstand installation, static, and settlement forces; withstand overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices, such as wells and horizontal collectors, shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.
  - Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow or their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover, refuse into the collection system or gas into the air. Any

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gravel used round pipe perforations should be of a dimension so as not to penetrate or block perforations.

- 3. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- III. Pursuant to 35 IAC 220.220(b)(3)(A) and (B), the landfill gas shall be conveyed to a gas control system through the collection header pipes. The gas mover equipment shall be sized to project the maximum flow rate of LFG using the following procedures:
  - 1. For existing gas collection systems, the flow data shall be used to project the maximum flow rate. If no data exists, the procedures in Condition 4.1.2(c)(iii)(b)(3)(B) shall be used.
  - For new gas collection systems, the maximum flow rate shall be determined in accordance with 35 IAC 220.240(a)
- G. Pursuant to 35 IAC 220.230, each Owner and Operator of an MSW landfill subject to the control requirements of 35 IAC 220 Subpart B must operate a gas collection system that routes all the collected gas to a gas control system that complies with the requirements in 35 IAC 220.230(f):
  - I. Pursuant to 35 IAC 220.230(a), the Owner and Operator of the MSW landfill shall operate an open flare designed and operated in accordance with 40 CFR 60.18.
  - II. Pursuant to 35 IAC 220.230(f), gas control systems must be operated in accordance with a permit issued to the applicable requirements of 35 IAC Subtitle G.

## Operational Standards for Gas Collection and Control Systems (NMOC)

- H. Pursuant to 35 IAC 220.250, Each Owner or Operator of an MSW landfill with a gas collection and control system shall:
  - I. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which the initial solid waste has been in place for:
    - 1. 5 years or more if active; or
    - 2 years or more if closed or at final grade.
  - II. Operate the collection system with negative pressure at each wellhead except under the following conditions:
    - 1. A fire or increased well temperature. The owner or operator of the MSW landfill shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 35 IAC 220.280(e)(1).
    - 2. Use of a geomembrane or synthetic cover. The owner or operator of the MSW landfill shall develop pressure limits associated with such a cover that must be approved by the Illinois EPA.

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- 3. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Illinois EPA.
- III. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C (131°F) and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Owner and Operator of the MSW landfill may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration that provides supporting data to show that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methagens must be approved by the Illinois EPA before such higher operating value may be used. Operating values shall be determined as follows:
  - 1. The nitrogen level shall be determined using Method 3C, Appendix A, 40 CFR 60
  - The oxygen level shall be determined by an oxygen meter using Method 3A, Appendix A, 40 CFR 60, except that:
  - (a) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
  - (b) A data recorder is not required;
  - (c) Only two calibrations gasses are required, a zero and span, and ambient air may be used as the span;
  - (d) A calibration error check is not required; and
  - (e) The allowable sample bias, zero drift, and calibration drift are plus or minus 10 percent.
- IV. Operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill. To determine if this level is exceeded, the Owner and Operator of the MSW landfill shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. A surface monitoring design plan shall be developed and includes a topographical map with the monitoring route and the rationale for any site specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. The monitoring plan shall be updated as necessary. Updated copies must be sent to the Illinois EPA and kept on-site at the MSW landfill.
- V. Operate the gas collection and control system such that all collected gases are vented to a control system designed and operated in compliance with 35 IAC 220.230, 220.250, and 220.270. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.
- VI. Operate the gas collection and control or treatment system at all times, except during shutdown or malfunction, provided that the

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duration of start-up, shutdown, or malfunction must not exceed 5 days for collection systems and must not exceed 1 hour for treatment or control devices.

- VII. If monitoring demonstrates that the operational requirements in 35 IAC 220.250(b), (c), or (d) are not met, the Owner and Operator of the MSW landfill shall take corrective action as specified in 35 IAC 220.240(a)(3) or (a)(5), or (c)(4). If such corrective actions are taken as specified in 35 IAC 220.240(a)(3) or (a)(5), or (c)(4), the monitored exceedance is not a violation of the operational requirements in 35 IAC 220.250.
- VIII. The collection and control system may be removed provided:
  - 1. The landfill is no longer accepting solid waste;
  - 2. A system removal has been submitted to the Illinois EPA, as provided by 35 IAC 220.280(d);
  - 3. The collection and control system has been operating a minimum of 15 years;
  - 4. The calculated NMOC gas produces by the landfill is less than 50 Mg/yr on three successive test dates, pursuant to the procedures in 35 IAC 220.260(b). The test dates shall be no less than 90 days apart, and no more than 180 days apart; and
  - 5. The system is not required to satisfy any applicable requirements in 35 IAC Subtitle G.

#### ii. Compliance Method (NMOC Requirements)

#### Compliance Procedures for Gas Collection and Control Systems (NMOC)

- A. Pursuant to 35 IAC 220.240(e), the Owner and Operator of the MSW landfill shall comply with the provisions of 35 IAC 220.240 at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction must not exceed 5 days for collection systems and must not exceed 1 hour for treatment or control devices
- B. Pursuant to 35 IAC 220.240(a), the methods specified in 35 IAC 220.240 (a)(1) through (a)(6) shall be used to determine whether the gas collection and control system is in compliance with 35 IAC 220.220.
  - I. The Owner and Operator of the MSW landfill shall use one of the equations in 35 IAC  $220.240\,(a)\,(1)\,(A)$ , (B), or (C) to calculate the maximum expected gas generation flow rate from the MSW landfill.
  - II. For the purpose of determining the sufficient number of gas collectors, the owner or operator shall design a system of vertical wells, horizontal collectors, or other type of collection device, capable of controlling and extracting gas from all portions of the landfill sufficient to meet the operational and performance standards of 35 IAC 220.220 through 220.250.
  - III. Pursuant to 35 IAC 220.240(a)(3), for the purpose of demonstrating whether the gas collection system flow rate of an active collection system is sufficient, the Owner and Operator of the MSW landfill shall measure gauge pressure in the gas collection header at each individual well monthly. If positive pressure exists, action shall

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be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 35 IAC 220.250(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days after the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days after the initial measurement of positive pressure. Any attempted corrective measure must not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Illinois EPA for approval.

- IV. Pursuant to 35 IAC 220.240(a)(5), for the purpose of identifying whether excess air infiltration into the landfill is occurring, the Owner and Operator of the MSW landfill shall monitor each well on a monthly basis for temperature and nitrogen or oxygen, as provided in to 35 IAC 220.250(c). If a well exceeds one of the operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days after the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days after the initial exceedance. An alternative timeline for correcting the exceedance may be submitted to the Illinois EPA for approval.
- V. Pursuant to 35 IAC 220.240(a)(6), if the collection system does not conform to the specifications pursuant to 35 IAC 220.220(b) or (c), the Owner and Operator of the MSW landfill shall provide information satisfactory to the Illinois EPA, as specified in 35 IAC 220.220(d), demonstrating that off-site migration is being controlled.
- C. Pursuant to 35 IAC 220.240(b), to comply with the operational standards in 35 IAC 220.250(a), the Owner and Operator of the MSW landfill shall install each well or design component as specified in a construction permit issued by the Illinois EPA. Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
  - I. 5 years or more if active; or
  - II. 2 years or more if closed or at final grade.
- D. Pursuant to 35 IAC 220.240(c), the Owner and Operator of the MSW landfill shall use the following procedures to comply with the surface methane operational standards as provided in 35 IAC 220.250(d):
  - The Owner and Operator of the MSW landfill shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the MSW landfill at 30-meter intervals for each collection area on a quarterly bases using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 35 IAC 220.240(d)
  - II. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
  - III. Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of Appendix A, 40 CFR 60, except that the probe inlet shall be placed within 5 to 10 cm of the ground.

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Monitoring shall be performed during typical meteorological conditions.

- IV. Any reading of 500 ppm or more above background shall be recorded as a monitored exceedance and the actions specified in 35 IAC 220.240(c)(4)(A) through (E) shall be taken. As long as these actions, specified below, are taken the exceedance is not a violation of the operational requirements of 35 IAC 220.250(d).
  - The location of each monitored exceedance shall be marked and the location recorded.
  - Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be remonitored within 10 calendar days after detecting the exceedance.
  - 3. If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days after the second exceedance. If the remonitoring shows a third exceedance for the same location, the action specified in 35 IAC 220.240(c)(4)(E) shall be taken. No further monitoring of that location is required until the action specified in 35 IAC 220.240(c)(4)(E) has been taken.
  - 4. If remonitoring of the location does not show an exceedance, as specified in 35 IAC 220.240 (c)(4)(B) or (c)(4)(C), the location shall be remonitored 1 month from the initial exceedance. If the 1 month remonitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1 month remonitoring shows an exceedance, the actions specified in 35 IAC 220.240(c)(4)(C) or (c)(4)(E) shall be taken, as appropriate.
  - 5. For any location where there are three monitored exceedances within a quarterly period, a new well or other collection device shall be installed within 120 calendar days after the initial exceedance. An alternate remedy to the exceedance, such as upgrading the blower, header pipes, or control device, and a corresponding timeline for the installation may be submitted to the Illinois EPA for approval.
- V. Pursuant to 35 IAC 220.240(c)(5), the Owner and Operator of the MSW landfill shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
- E. Pursuant to 35 IAC 220.240(d), the following instrumentation specifications and procedures for surface emission monitoring devices apply to the monitoring required in 35 IAC 220.240(c):
  - The portable analyzer shall meet the instrument specifications of Section 3 of Method 21, Appendix A, 40 CFR 60, except that "methane" shall replace all references to "VOC."
  - II. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.
  - III. To meet the performance evaluation requirements of Section 3.1.3 of Method 21, Appendix A, 40 CFR 60, the instrument evaluation

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procedures of Section 4.4 of Method 21, Appendix A, 40 CFR 60, shall be used.

IV. The calibration procedures provided in Section 4.2 of Method 21, Appendix A, 40 CFR 60, shall be followed immediately before commencing a surface monitoring survey.

# Test Methods and Procedures (NMOC)

- F. Pursuant to 35 IAC 220.260(b), after the installation of a collection and control system in compliance with 35 IAC 220.220 and 220.230, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 35 IAC 220.250(h), using the equation provided in 35 IAC 220.260(b).
- G. Pursuant to 35 IAC 220.260(c), a MSW landfill with an already installed gas collection system complying with the provisions in 35 IAC 220.220, the Owner and Operator of the MSW landfill shall calculate the NMOC emission rate using the procedures in 35 IAC 220.260(b). For areas of the landfill where the Owner and Operator of the MSW landfill has not been required to install a well yet, the Owner and Operator of the MSW landfill may select an appropriate method from 35 IAC 220.260(a) to estimate emissions.
- H. Pursuant to 35 IAC 220.260(d), the Owner and Operator of the MSW landfill shall use Method 25C or Method 18, Appendix A of 40 CFR 60, in conjunction with the equation in 35 IAC 220.260(d) to determine compliance with 98-percent efficiency or the 20 ppmv outlet concentration level as required by 35 IAC 220.210(d)(2). If using Method 18, the minimum list of compounds to be tested shall be those published in USEPA's Compilation of Air Pollutant Emission Factors (AP-42).
- I. Pursuant to 35 IAC 220.260(f), the Owner and Operator of the MSW landfill may use the procedures described in USEPA's Compilation of Air Pollutant Emission Factors (AP-42) to estimate emissions pursuant to the annual emission report required by 35 IAC 210.302(a). The Owner and Operator of the MSW landfill shall use the most recently published applicable values to calculate emissions. To determine applicability of or compliance with Condition 4.1.2(c)(vi), the Owner and Operator of the MSW landfill must use the tiered emission estimates provided in 35 IAC 220.260(a)(1) through (4).
- J. I. Pursuant to 35 IAC 220.260(g)(1), upon request by the Illinois EPA, the owner or operator of an MSW landfill shall at their own expense demonstrate compliance with the applicable requirements of 35 IAC 220 using the appropriate test method in 35 IAC 220.260(g).
  - II. The Owner and Operator of the MSW landfill shall notify the Illinois EPA no less than 30 days prior to conducting a test to demonstrate compliance with 35 IAC 220 so that the Illinois EPA may observe the test.

## Monitoring (NMOC)

- K. Pursuant to 35 IAC 220.270, the Owner and Operator of the MSW landfill shall install a sampling port and thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:
  - Measure the gauge pressure in the gas collection header on a monthly basis, as provided in 35 IAC 220.240(a)(3) and;
  - II. Monitor the temperature and nitrogen or oxygen concentration in the landfill gas on a monthly basis, as provided in 35 IAC 220.240(a)(5).

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- L. Pursuant to 35 IAC 220.270(c), the Owner and Operator of the MSW landfill shall install calibrate, maintain, and operate the open flare according to the manufacturers' specifications with the following equipment:
  - I. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
  - II. A device that records flow to or bypass of the flare. The Owner and Operator of the MSW landfill shall either:
    - Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
    - Secure the bypass line valve in the closed position with a carseal or lock-and-key type of configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
  - III. If the Owner and Operator of the MSW landfill seeks to install a collection or control system that does not meet the specifications in 35 IAC 220.220(b) or (c), the Owner and Operator of the MSW landfill shall provide information satisfactory to the Illinois EPA as provided in 35 IAC 220.220(d) and 220.230(d), describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures.
  - IV. The Owner and Operator of the MSW landfill shall monitor surface concentrations of methane according to the instrument specifications and procedures in 35 IAC 220.240(c) and (d). Any inactive landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods must resume annual monitoring. Any methane reading of 500 ppm or more above the background detected during the annual monitoring returns the monitoring frequency to quarterly.

# Recordkeeping Requirements (NMOC)

- M. Pursuant to 35 IAC 220.290, the Owner and Operator of the MSW landfill shall keep for at least 5 years up-to-date, readily accessible, on-site records for the following:
  - I. For the life of the landfill, the design capacity report in which the landfill became equal to or greater than 2.5 million Mg and 2.5 million  $\rm m^3$ , the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours upon request. Either paper copy or electronic formats are acceptable.
  - II. Pursuant to 35 IAC 220.290(b), for the life of the control equipment, data measured during initial performance test or compliance determination. Records of the control device vendor specifications shall be maintained until removal
    - 1. For active collection systems:

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- (a) The maximum expected gas generation flow rate as calculated in 35 IAC 220.240(a). The Owner and Operator of the MSW landfill may use another method to determine the maximum gas generation flow rate if the method has been approved by the Illinois EPA.
- (b) The density of the wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 35 IAC 220.220(b)(1)(A).
- 2. For the open flare:
  - (a) The flare type, i.e., steam-assisted, air-assisted, or non-assisted;
  - (b) All visible emission readings;
  - (c) Heat content determination;
  - (d) Flow rate or bypass flow rate measurements;
  - (e). Exit velocity determination made during performance testing as specified in 40 CFR 60.18;
  - (f) Continuous records of the flare pilot flame or flare flame monitoring, including records of all periods of operations during which the flare pilot flame or the flare flame is absent.
- III. Continuous records of equipment operation parameters specified to be monitored in 35 IAC 220.270 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
  - 1. For the open flare, records of the flame or flare pilot flame monitoring specified in 35 IAC 220.270(c), and all periods of operation in which the flare pilot flame is absent.
- IV. For the life of the collection system, a plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector including:
  - 1. The location of all newly installed collectors as specified under 35 IAC 220.240(b).
  - 2. The nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection, pursuant to 35 IAC 220.220(b)(1)(D)(i), as well as any nonproductive areas excluded from collection, pursuant to 35 IAC 220.220(b)(1)(D)(ii).
- V. All collection and control system exceedances of the operational standards in 35 IAC 220.250, the reading the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
- VI. Owners or Operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million Mg or 2.5 million m<sup>3</sup>, as provided in the

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definition of "design capacity", shall keep records of the annual recalculation of site-specific density, design capacity, and the supporting documentation.

# d. i. Hazardous Air Pollutant Requirements (HAP)

- A. I. Pursuant to 40 CFR 63.1955(a)(2), the owner or operator of the MSW landfill shall comply with the requirements of 35 IAC Part 220.
  - II. Pursuant to 40 CFR 63.1955(b), the owner or operator of the MSW landfill shall comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the General Provisions of 40 CFR 63 Subpart A specified in Table 1 of 40 CFR 63 Subpart AAAA (See Section 7.2).
  - III. Pursuant to 40 CFR 63.1955(c), for approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, the Owner or Operator of the MSW landfill must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 35 IAC Subpart 220, these alternatives can be used to comply with this requirement, except that the MSW landfill must comply with the startup, shutdown, and maintenance (SSM) requirements in Table 1 of 40 CFR 63 Subpart A. The Owner and Operator of the MSW landfill must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including all information on all deviations that occurred during the 6-month reporting period. Deviation for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

#### ii. Compliance Method (HAP Requirements)

#### General and Continuing Compliance Requirements

- A. I. Pursuant to 40 CFR 63.1960, compliance shall be determined as per the requirements in 40 CFR 60 Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected pursuant to 40 CFR 60.756(b)(1), (c)(1), and (d) of Subpart WWW, are used to demonstrate compliance with the operating conditions described in 40 CFR 63 Subpart AAAA and a deviation of those requirements is a deviation from the requirements of Subpart AAAA. Finally, the Owner and Operator of the MSW landfill must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of 40 CFR 63 Subpart AAAA.
  - II. Pursuant to 40 CFR 63.1965, a deviation is defined in 40 CFR 63.1990. For the purposes of the landfill monitoring and SSM requirements, deviations include the following items:
    - 1. When the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) are exceeded.
    - When 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
    - 3. When a SSM plan is not developed or maintained on site.

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- III. Pursuant to 40 CFR 63.1975, 3-hour averages for the purpose of determining compliance shall be calculated the same way as they are calculated in 40 CFR 60 Subpart WWW, except that the data collected during the events listed below are not to be included in any average computed:
  - Monitoring system breakdown, repair, calibration checks, and zero (low-level) and high-level adjustments;
  - Startups;
  - 3. Shutdowns; and
  - 4. Malfunctions

#### Recordkeeping

- B. I. Pursuant to 40 CFR 63.1980(a), the Owner or Operator of the MSW landfill shall keep records as specified in 35 IAC Part 220, with the exception that the annual report be submitted every 6 months.
  - II. Pursuant to 40 CFR 63.1980(b), the Owner or Operator of the MSW landfill shall keep records and reports specified in the General Provisions of 40 CFR 60 and 40 CFR 63 Subpart AAAA as shown in Table 1 of 40 CFR 63 Subpart AAAA. Applicable records in the General Provisions include items such as SSM plans and SSM plan reports.
  - III. Pursuant to 40 CFR 63.1980(g), if the Owner of Operator of the MSW landfill adds liquids other than leachate in a controlled fashion to the waste mass and is not required to comply with the bioreactor requirements in 40 CFR 63.1947, 63.1955(c), and 63.1980(c) through (f), the Owner or Operator of the MSW landfill shall keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses.

    Moisture level sampling or mass balances calculations can be used. The Owner or Operator of the MSW landfill must document the calculations and the basis of any assumptions. These records of calculations must be kept until cessation of liquids addition.

## e. i. <u>Asbestos</u>

- A. I. Pursuant to 40 CFR 61.151, the Owner and Operator of the MSW landfill shall operate any inactive waste disposal site, as defined in 40 CFR 61.141 that has received deposits of asbestos-containing waste material (ACWM) as follows:
  - 1. Comply with one of the following:
    - (a) Pursuant to 40 CFR 61.151(a)(1), either discharge no visible emissions to the outside air from an inactive waste disposal site subject to 40 CFR 61.151; or
    - (b) Pursuant to 40 CFR 61.151(a)(2), cover the ACWM with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a

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- cover of vegetation on the area adequate to prevent exposure of the ACWM; or
- (c) Pursuant to 40 CFR 61.151(a)(3), cover the asbestoscontaining waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestoscontaining waste; or
- (d) Pursuant to 40 CFR 61.151(a) (4), for inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods listed above and in 40 CFR 61.151(a) (1), (2), and (3). Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.
- 2. Pursuant to 40 CFR 61.151(b), unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as required in 40 CFR 61.151(b), or comply with 40 CFR 61.151(a)(2) or (a)(3).
- 3. Pursuant to 40 CFR 61.151(c), the Owner and Operator of the MSW landfill may use an alternative control method that has received prior approval of the Illinois EPA or USEPA rather than comply with the requirements of 40 CFR 61.151(a) or (b).
- 4. Pursuant to 40 CFR 61.151(e), within 60 days of a site becoming inactive, record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:
  - (a) The land has been used for the disposal of asbestoscontaining waste material;
  - (b) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in 40 CFR 40 CFR 61.154(f) have been filed with the Administrator; and
  - (c) The site is subject to 40 CFR Part 61, Subpart M.
- II. Pursuant to 40 CFR 61.154, the Owner and Operator of the MSW landfill shall operate any active waste disposal site that receives ACWM as follows:
  - Pursuant to 40 CFR 61.154(a), either there must be no visible emissions to the outside air from any active waste disposal site where ACWM has been deposited, or the requirements of 40 CFR 61.154(c) or (d) must be met.
  - 2. Pursuant to 40 CFR 61.154(b), unless a natural barrier adequately deters access by the general public, either warning

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signs and fencing must be installed and maintained as shown in 40 CFR 61.154(b), or the requirements of 40 CFR 61.154(c)(1) must be met.

- 3. Pursuant to 40 CFR 61.154(c), rather than meet the no visible emission requirement of 40 CFR 61.154(a), at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:
  - (a) Pursuant to 40 CFR 61.154(c)(1), be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or
  - (b) Pursuant to 40 CFR 61.154(c)(2), be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Illinois EPA or USEPA. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.
- 4. Pursuant to 40 CFR 61.154(d), rather than meet the no visible emission requirement of 40 CFR 61.154(a), use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in 40 CFR 61.149(c)(2).
- 5. Pursuant to 40 CFR 61.154(g), upon closure of the active waste disposal site, the Owner and Operator of the MSW landfill shall comply with all the provisions of 40 CFR 61.151.

# ii. Compliance Method (Asbestos Requirements)

#### Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Owner and Operator of the MSW landfill shall perform a monthly inspection on all inactive and active ACWM disposal sites at the source to demonstrate compliance with the visible emissions and/or cover requirements of Condition 4.1.2(d)(i)(A) and 40 CFR 61.151(a) and 61.154(c). If the cover at the site is not in compliance with the ACWM cover requirements, pursuant to Condition 4.1.2(d)(i)(A) and 40 CFR 61.151(a) and 61.154(c), or if ACWM is exposed, the Owner and Operator of the MSW landfill shall either monitor for visible emissions using USEPA RM 22 or take corrective action within 4 hours of the observation of exposed ACWM, in accordance with the cover and or control requirements of Condition 4.1.2(d)(i)(A) and 40 CFR 61.151(a) and 61.154(c), as applicable. All inspections and/or corrective actions and data as per RM 22 must be documented. The monthly cover integrity survey conducted in accordance with 40 CFR 60.755(c)(5) may be conducted and documented concurrently with the asbestos compliance demonstration.

# Recordkeeping

B. I. Pursuant to 40 CFR 61.154(e), for all asbestos-containing waste material received, the Owner and Operator of the MSW landfill shall:

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- Pursuant to 40 CFR 61.154(e)(1), maintain waste shipment
  records, using a form similar to that shown in Figure 4 of 40
  CFR 61 Subpart M, and include the following information:
  - (a) The name, address, and telephone number of the waste generator.
  - (b) The name, address, and telephone number of the transporter(s).
  - (c) The quantity of the ACWM in cubic meters (cubic yards).
  - (d) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the Illinois EPA Compliance Section, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.
  - (e) The date of the receipt.
- Pursuant to 40 CFR 61.154(e)(2), as soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.
- 3. Pursuant to 40 CFR 61.154(e)(3), upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the Illinois EPA Compliance Section. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
- II. Pursuant to 40 CFR 61.154(f), maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.
- III. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Owner and Operator of the MSW landfill shall collect and maintain the records of the inspections and/or corrective actions and data as per RM 22 required pursuant to Condition 4.1.2(e)(i)(A).

#### 3. Non-Applicability Determinations

- a. Pursuant to 40 CFR 60.750(a), this permit is issued based on the MSW landfill not being subject to the New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills, 40 CFR 60 Subpart WWW, because the MSW landfill has not commenced construction, reconstruction or modification on or after May 30, 1991.
- b. The MSW landfill and fugitive PM operations are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of the unit(s), a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- c. The MSW landfill is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the MSW landfill is subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i) and the MSW landfill does not

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have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

#### 4. Other Requirements

For the emission units in Condition 4.1.1 above, the Owner and Operator of the MSW landfill shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

#### a. i. Title I Requirements

A. Emissions from the 1,600 scfm flare shall not exceed the following limits. Compliance with these annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1R]

Pollutant	lb/hr	Ton/yr
CO	19.79	86.68
$NO_x$	3.64	15.93
VOM	0.10	0.44

Note: The above limits, including limits for particulate matter in Condition 4.1.2(a)(i)(C) and limits for  $SO_2$  in 4.1.2(b)(i)(B), were originally established in the CAAPP permit issued for the source on May 21, 2002 to clearly define the emission limits that apply to this emission unit. These T1R limits revise T1N limits per the request in the renewal application.

# 5. Reporting Requirements

The Owner and Operator of the MSW landfill shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 2.

#### a. <u>Deviation Reporting</u>

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Owner and Operator of the MSW landfill shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e. NESHAP requirement:
  - I. Requirements in Conditions 4.1.2(a), 4.1.2(b), 4.1.2(c), and 4.1.2(d), 4.1.2(e).
- ii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.
  - B. Emission unit(s) and/or operation involved.
  - C. The duration of the event.
  - D. Probable cause of the deviation.
  - E. Corrective actions or preventative measures taken.
- iii. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.6(b).

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#### b. Federal Reporting

i. A. Pursuant to 40 CFR 60.33c(e)(2)(ii) and 40 CFR 60.757(d), the owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Illinois EPA may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Illinois EPA, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

#### c. NMOC Reporting

- i. A. Pursuant to 35 IAC 220.280(a)(1), the Owner and Operator of the MSW landfill shall submit a design and capacity report to the Illinois EPA. The initial design capacity report shall be submitted no later than October 29, 1998.
  - B. Pursuant to 35 IAC 220.280(a)(2)(A) and (B), the initial design capacity shall include the following information:
    - i. A map or plot of the landfill providing the size and location of the landfill and identifying all areas where solid waste may be landfilled according to the provisions of the State or RCRA construction or operating permit.
    - ii. The maximum design capacity of the landfill. If the maximum design capacity is specified in a State construction or RCRA permit, a copy of the permit specifying the maximum design capacity of the landfill shall be provided. If the maximum design capacity of the landfill is not specified in a permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters (e.g., depth of solid waste, waste acceptance rate, compaction practices, as applicable), as part of the report. The Illinois EPA may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.
  - C. Pursuant to 35 IAC 220.280(a)(3), the Owner and Operator of the MSW landfill shall submit an amended design capacity report to the Illinois EPA providing notification of an increase in the design capacity of the landfill within 90 days after an increase in the maximum design capacity. This increase in design capacity may result from an increase in the permitted volume or an increase in the density of the landfill as documented in the annual recalculation required in 35 IAC 220.290(f).
  - D. Pursuant to 35 IAC 220.280(b)(4), the owner and operator of the MSW shall submit an annual emissions report to the Illinois EPA. MSW landfills that have installed a gas collection and control system that meets the minimum requirements of 35 IAC Part 220 are not required to submit an annual NMOC emission rate report but are required to submit an annual emissions report. Owners or operators filing a 5-year estimate of NMOC emissions may use a 5-year estimate for NMOC, so long as they file an annual emission report and meet the minimum requirements of 35 IAC 220.280(b)(2).
  - E. Pursuant to 35 IAC 220.280(e), the Owner and Operator of the MSW landfill shall submit to the Illinois EPA annual reports of the following recorded information:
    - Value and length of time for exceedance of applicable parameters under 35 IAC 220.270(c)

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- II. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified in 35 IAC 220.270.
- III. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of trim the control device was not operation.
- IV. All periods when the collection system was not operating in excess of 5 days.
- V. The location of each exceedance of the 500 ppm methane concentration, and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- VI. The date of installation and the location of each well or collection system expansion add pursuant to 35 IAC 220.240(a)(3), 220.240(b), and 220.240(c)(4).
- F. The Owner and Operator of the MSW landfill shall include the following information with performance tests required pursuant to 35 IAC 220.210(d)(2):
  - I. A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
  - II. The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
  - III. The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
  - IV. The sum of gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area;
  - V. Provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
  - VI. The provisions for the control of off-site migration of gas.
- G. The Owner and Operator of the MSW landfill shall submit the following information to the Illinois EPA 30 days prior to removal or cessation of operation of the control equipment. The Illinois EPA may request additional information as necessary to verify that all of the conditions for removal of equipment in accordance with 35 IAC 220.250(h) have been met:
  - I. Certification that the operation of the collection and control system is no longer required pursuant to 35 IAC Subtitle G;
  - II. Documentation demonstrating that the 15-year minimum control period has expired; and

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III. Pursuant to 35 IAC 220.260(b), dated copies of the 3 successive NMOC emission rate reports, as provided for in 35 IAC 220.250(h), demonstrating that the landfill is no longer producing 50 Mg/year or greater of NMOC.

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# Section 5 - Additional Title I Requirements

This Section is reserved for Title I requirements not specified in Sections 3 or 4. As of the date of issuance of this permit, there are no Title I requirements that need to be separately addressed in this Section.

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# Section 6 - Insignificant Activities Requirements

# 1. Insignificant Activities Subject to Specific Regulations

This condition is reserved for insignificant activities, as defined in 35 IAC 201.210 and 201.211, which are subject to specific standards promulgated pursuant Sections 111, 112, 165, or 173 of the Clean Air Act, see Sections 9.1(d) and 39.5(6)(a) of the Act. As of the date of issuance of this permit, there are no such insignificant activities present at the source.

# 2. Insignificant Activities in 35 IAC 201.210(a)

In addition to any insignificant activities identified in Condition 6.1, the following additional activities at the source constitute insignificant activities pursuant to 35 IAC 201.210 and 201.211:

Insignificant Activity	Number of Units	Insignificant Activity Category
Maintenance Shop Heaters, Natural Gas Fired	1	35 IAC 201.210(a)(4)
Office Heater	1	35 IAC 201.210(a)(4)
30,000 Gallon Underground Leachate Tank	1	35 IAC 201.210(a)(10)
20,000 Gallon Above-Ground Leachate Tank	2	35 IAC 201.211(a)
1,200 Gallon Diesel Tank	1	35 IAC 201.210(a)(11)

#### 3. Insignificant Activities in 35 IAC 201.210(b)

Pursuant to 35 IAC 201.210, the source has identified insignificant activities as listed in 35 IAC 201.210(b)(1) through (28) as being present at the source. The source is not required to individually list the activities.

#### 4. Applicable Requirements

Insignificant activities in Conditions 6.1 and 6.2 are subject to the following general regulatory limits notwithstanding status as insignificant activities. The Owner and Operator of the MSW landfill shall comply with the following requirements, as applicable:

- a. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided in 35 IAC 212.123(b).
- b. Pursuant to 35 IAC 215.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.

# 5. Compliance Method

Pursuant to Section 39.5(7) (b) of the Act, the source shall maintain records of the following items for the insignificant activities in Conditions 6.1 and 6.2:

a. List of all insignificant activities, including insignificant activities added as specified in Condition 6.6, the categories the insignificant activities fall under, and supporting calculations as needed for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

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b. Potential to emit emission calculations before any air pollution control device for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

#### 6. Notification Requirements for Insignificant Activities

The source shall notify the IEPA accordingly to the addition of insignificant activities:

#### a. Notification 7 Days in Advance

- i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):
  - A. A description of the emission unit including the function and expected operating schedule of the unit.
  - B. A description of any air pollution control equipment or control measures associated with the emission unit.
  - C. The emissions of regulated air pollutants in lb/hr and ton/yr.
  - D. The means by which emissions were determined or estimated.
  - E. The estimated number of such emission units at the source.
  - F. Other information upon which the applicant relies to support treatment of such emission unit as an insignificant activity.
- ii. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(2) through 201.210(a)(18) and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3.
- iii. Pursuant to Sections 39.5(12)(a)(i)(b) and 39.5(12)(b)(iii) of the Act, the permit shield described in Section 39.5(7)(j) of the Act (see Condition 2.7) shall not apply to any addition of an insignificant activity noted above.

### b. <u>Notification Required at Renewal</u>

Pursuant to 35 IAC 201.212(a) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a) and is currently identified in Conditions 6.1 or 6.2, a notification is not required until the renewal of this permit.

### c. Notification Not Required

Pursuant to 35 IAC 201.212(c) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(b) as describe in Condition 6.3, a notification is not required.

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# Section 7 - Other Requirements

# 1. Testing

- a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:
  - i. The name and identification of the emission unit(s) being tested.
  - ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.
  - iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.
  - iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.
  - v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
  - vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.
  - vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
  - viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
  - ix. Sampling of materials, QA/QC procedures, inspections, etc.
- b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.5(7)(a) of the Act as follows:
  - i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.
  - ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.
- c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but

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no later than ninety (90) days after completion of the test, unless it is required otherwise in applicable state or federal statutes or the IEPA may at the discretion of the Compliance Section Manager (or designee) an alternative date is agreed upon in advance pursuant to Section 39.5(7)(a) of the Act. The Final Report shall include as a minimum:

- i. General information including emission unit(s) tested.
- ii. A summary of results.
- Discussion of conditions during each test run (malfunction/breakdown, iii. startup/shutdown, abnormal processing, etc.).
- iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
- v. Detailed description of test conditions, including:
  - Process information, i.e., mode(s) of operation, process rate, e.g. fuel or Α. raw material consumption.
  - Control equipment information, i.e., equipment condition and operating parameters during testing.
  - A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
- νi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- An explanation of any discrepancies among individual tests or anomalous data.
- viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.
- Discussion of whether protocol was followed and description of any changes to the ix. protocol if any occurred.
- Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.
- d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

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# 2. 40 CFR 63 Subpart A Requirements (NESHAP)

# a. 40 CFR 63 Subpart A and Subpart AAAA - National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste (MSW) Landfills

Pursuant to 40 CFR 63 Subpart A and Subpart AAAA, the Owner and Operator of the MSW landfill shall comply with the following applicable General Provisions as indicated:

General Provision Citation

Description Explanation

CICACION	Description	Expianacion
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, Part 60 Subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, Part 60 Subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with non-opacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, Part 60 Subpart A.
63.10(b)(2)(i) -(b)(2)(v)	General recordkeeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	

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General Provision Citation

Description Explanation

CICACION	Description	Explanacion
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, Part 60 Subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	

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# Section 8 - State Only Requirements

# 1. Permitted Emissions for Fees

The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 2.3(e), not considering insignificant activities as addressed by Section 6, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. The Owner and Operator of the MSW landfill shall maintain records with supporting calculations of how the annual emissions for fee purposes were calculated. This Condition is set for the purpose of establishing fees and is not federally enforceable. See Section 39.5(18) of the Act.

Pollutant	Tons/Year
POTTULATIL	10HS/leal

Volatile Organic Material	(VOM)	2.72
Sulfur Dioxide	(SO <sub>2</sub> )	3.49
Particulate Matter	(PM)	16.40
Nitrogen Oxides	$(NO_x)$	15.93
HAP, not included in VOM or PM	(HAP)	3.40
	Total	41.94

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# Attachment 1 - Acronyms and Abbreviations

acfm	Actual cubic feet per minute
ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment trading unit
BACT	Best Available Control Technology
BAT	Best Available Technology
Btu	British Thermal Units
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CISWI	Commercial Industrial Solid Waste Incinerator
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
ERMS	Emissions Reduction Market System
°F	Degrees Fahrenheit
GHG	Green house gas
GACT	Generally Acceptable Control Technology
gr	Grains
HAP	Hazardous air pollutant
Нд	Mercury
HMIWI	Hospital medical infectious waste incinerator
hp	Horsepower
hr	Hour
H <sub>2</sub> S	Hydrogen sulfide
I.D. No.	Identification number of source, assigned by IEPA
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
kw	Kilowatts
LAER	Lowest Achievable Emission Rate
lbs	Pound

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m	Meter
MACT	Maximum Achievable Control Technology
М	Thousand
MM	Million
mos	Month
MSDS	Material Safety Data Sheet
MSSCAM	Major Stationary Sources Construction and Modification (Non-attainment New Source Review)
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PB	Lead
PEMS	Predictive Emissions Monitoring System
PM	Particulate matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration
PSEU	Pollutant-Specific Emission Unit
psia	Pounds per square inch absolute
PTE	Potential to emit
RACT	Reasonable Available Control Technology
RMP	Risk Management Plan
scf	Standard cubic feet
SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile organic material

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# Attachment 2 - Contact and Reporting Addresses

IEPA Compliance Section	Illinois EPA, Bureau of Air Compliance & Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276  Phone No.: 217/782-2113
IEPA Stack Test Specialist	Illinois EPA, Bureau of Air Compliance Section Source Monitoring - Third Floor 9511 Harrison Street Des Plaines, Illinois 60016  Phone No.: 847/294-4000
IEPA Air Quality Planning Section	Illinois EPA, Bureau of Air Air Quality Planning Section (MC 39) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276  Phone No.: 217/782-2113
IEPA Air Regional Field Operations Regional Office #2	Illinois EPA, Bureau of Air Regional Office #2 412 SW Washington Street, Suite D Peoria, Illinois 61602  Phone No.: 309/671-3022
IEPA Permit Section	Illinois EPA, Bureau of Air Permit Section (MC 11) 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506 Phone No.: 217/785-1705
Administrator	USEPA (AR - 17J) Air and Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604 Phone No.: 312/353-2000

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# Attachment 3 - Example Certification by a Responsible Official

	SIGNATURE BLOC	K
NOTE: THIS CERTIFI	ICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATI i.	ONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS
INFORMATION CONT FICTITIOUS, OR FRA	ENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORME TAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE UDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE II NSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H))	. ANY PERSON WHO KNOWINGLY MAKES A FALSE,
BY:		
	AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
l	TYPED OR PRINTED NAME OF SIGNATORY	DATE

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